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(54) Title: LIBRARIES OF POLYHYDROXAMATES AND THEIR ANALOGS

(57) Abstract

A method of synthesizing desired polyhydroxamates and polyhydroxamate analogs is provided. The method comprises linking a first component of the desired polyhydroxamate or polyhydroxamate analog to a support matrix under conditions effective to form a first matrix-bound intermediate of said desired polyhydroxamate or analog, extending said first matrix-bound intermediate using reagents and reaction conditions effective to form one or more additional matrix-bound intermediates of said desired polyhydroxamate or analog, thereby forming a matrix-bound precursor of the desired polyhydroxamate or polyhydroxamate analog. Protective groups used during synthesis of the precursor are removed and the matrix-bound precursor is cleared from the support matrix, thereby synthesizing the desired polyhydroxamate or polyhydroxamate analog. Methods of making, screening and selecting libraries of candidate polyhydroxamates, the libraries and polyhydroxamates, polyhydroxamate analogs, their intermediates, and methods for using such compounds and their compositions are also disclosed.